Research Paper Zoology

Report on A New Species of The Genus Krimi (Cestoda: Dilepidiae) From Latur District (M.S.), India

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ABSTRACT

The present study deals with a new species of the Krimi geetaae sp.nov. known of the genus Krimi is characterized by strobili, consist of about very few segments, increased towards the posterior end. Rostellum is medium in size, oval in shape with two pairs of rostellar hooks, mature segments broader than long, Craspodate shape, testes medium in size, oval in shape, 29 in numbers, cirrus pouch medium, elongated, slightly curved, ovary is indistinctly bilobed, placed middle of the segments.

KEYWORDS Cestodes, Dilepidiae, Krimi, Latur,

INTRODUCTION

Burt (1944) erected a new genus, *Krimi* with its type species, *K. chrysocolaptis* from *Chryscolaptes quttacristatus stricklandi* (Layard, 1854) in Ceylon. Shinde and Gaikwad added *K. burti* from *Venellus indicus* in 1981 and *K.udgirensis* from the same host in 1984. Since then no species is added to this genus.

The present communication, deals with the description, of a new species, of the genus as *K.geetaae* n.sp. collected from the intestine of an Indian myna, *Acridotheres tristis*, at Aurad (shahajani), Tq. Nilanga , Dist. Latur, M.S., India.

MATERIAL AND METHODS

Cestode parasites were collected from the intestine of *Acridotheres tristis* at. Aurad Tq. Nilanga District Latur (M.S.) India. These Cestodes preserved in hot 4% formalin and stained with Harris haematoxylin, passed through various alcoholic grades, cleared in xylene, mounted in D.P.X. and drawings are made with the aid of camera lucida. All measurements are given in millimeters. The identification is made with the help of Systema Helminthum.

DESCRIPTION

Ten worms were collected, from the intestine of an Indian myna, *Acridotheres tristis*, at Aurad (shahajani), Tq. Nilanga , Dist. Latur, M.S., India.

The worms were of medium length, with thick musculature, white in colour. The scolex is medium in size, distinctly marked off from the strobila, almost sqarish and measures 0.679 to 0.733 in length and 0.597 to 0.767 in breadth. The scolex bears four suckers. The suckers are medium in size , oval in shape, arranged in two pairs , one pair in each half region of the scolex, suckers of each pair , overlapping on each other and measure 0.184 to 0.214 in length and 0.189 to 0.223 in breadth. The armed rostellum is present, it is medium in size , oval in shape , transversely elongated , with two pairs of rostellar hooks and measures 0.087 to 0.165 in length and 0.155 to 0.228 in breadth. The rostellar hooks are small in size, medium in length, slightly curved, single pronged and measure 0.027-0.028 in length and 0.002-0.003 in breadth. The neck is very long, medium in size, broader anteriorly, narrow posteriorly and measures 0.703 to 0.742 in length and 0.635 to 0.655 in width. The mature proglottides are broader than long, almost four times broader than long, with lateral irregular concave or convex margins, craspedote, and measure 0.510 to 0.602 in length and 2.114 to 2.743 in breadth. The testes are small to medium in size, oval in shape, unevenly distributed, ventral to ovarian lobes, in two lateral groups, 29 in number and measure 0.022-0.079 in length and 0.034-0.079 in breadth. The cirrus pouch is medium in size, elongated, obliquely placed, narrow anteriorly and posteriorly, broader in the middle, slightly curved and measures 0.124 to 0.136 in length and 0.034 to 0.056 in breadth. The cirrus is thin, medium in size, slightly curved, contained within the cirrus pouch and measures 0.124 in length and 0.011 in breadth. The ovary is indistinctly bilobed, in the central medulla, in the middle of the segments and measures 0.311 to 0.350 in length and 0.352 to 0.409 in breadth. The ootype is medium in size, oval in shape, placed centrally, between the ovarion lobes, in the centre of the segments and measures 0.045 to 0.068 in length and 0.045 to 0.056 in diameter. The vagina is a thin tube, elongated, situated in front of the cirrus pouch, runs transversely and forms a receptaculm seminis, reaches and opens into the ootype and measures 0.112 in length and 0.011 in breadth. The receptaculum seminis is large in size, oval in shape, situated in the anterior most part of the segment and measures 0.102 to 0.136 in length and 0.124 to 0.147 in breadth. The vitelline gland is medium in size, roughly triangular in shape, post ovarian, compact, situated near the posterior margin of the segment and measures 0.068 to 0.090 in length and 0.045 to 0.090 in breadth. The genital pores are medium in size, oval in shape, in the anterior 1/3rd region of the segments, and measures 0.034 to 0.056 in length and 0.034 to 0.045 in breadth. The longitudinal excretory canals are medium in width and measures 0.022 in width. The gravid segments were not available.

DISCUSSION

The genus *Krimi* is erected by Burt, 1944 as a type species *K. chrysocolaptis* from *Chrysocolaptes qultacristatus stricklandi*, Shinde and gaikwad added *K. burti* from *Venellus indicus* in 1981 and *K. udgirensis* from the same host in 1981.

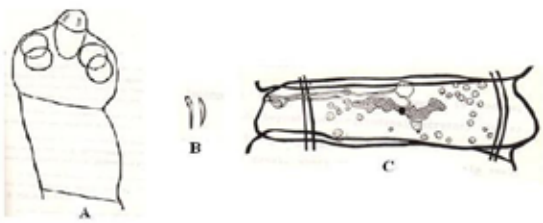
The worm under discussion differs from the earlier species, in many characters, which are as follows.

1. In the present worm, the scolex is almost squarish in shape whereas the same in *K. chrysocolaptis* is oval, *K. burti* is almost quadrangular and in *K. udgirensis* is globular.
2. In the present Cestode, the rostellar hooks are 4 in number, where a the same in *K. chrysocolaptis* are 20; in *K. burti* 14 and in *K. udgirensis*, are 16.
3. In the present Cestode, the testes are 20-30 (29) in number where as the same in *K. chrysocolaptis* 38, in *K. burti* 10 and *K. udgirensis* 20 in number.
4. In the present tapeworm, the cirrus pouch is medium, elongated, not extending beyond the longitudinal excre-

tory canals; whereas the same in *K. burti* long, extending beyond the longitudinal excretory canal, where as in *K. chrysocolaptis* small and in *K. udgirensis* large, cylindrical, obliquely placed.

5. The present worm differ from *Krimi triange* which is having the scolex almost globular, rostellar hooks 10 in number, mature segments squarish. Testes 32 in numbers, ovary bilobed, butterfly shaped, each lobe contains 6-7 blunt acini. Vagina is long tube. Ootype small, round, posterior to isthmus. Genital pores regularly alternate.
6. The present worm differ from *Krimi francolinusae* which is having the scolex well developed, rostellar hooks 18 in number, mature segments two and half time broader than long. Testes 22 in numbers, ovary bilobed. Vagina is thin tube. Ootype large, round, posterior to ovary. Genital pores regularly alternate.

The above noted characters are enough, to erect a new species, for these worms and hence the name *Krimi geetaae* n. sp. is proposed, in honour of the mother of the author, late. Geeta Vasantrao Solunke, for her constant encouragement and inspiration for the completion of this work.



A. Scolex B. Hooks C. Mature segment

Fig. *Krimi geetaae* sp. nov.

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